IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.:   10/797,529   Confirmation No.: 4521
Appellant(s):   Poyhonen et al.
Filed: March 10, 2004
Art Unit: 2616
Examiner: Phan, Tri H.
Title: SYSTEM AND METHOD FOR ESTABLISHING AN INTERNET PROTOCOL
                    CONNECTION WITH A TERMINATING NETWORK NODE

Customer No.:   00826

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF

In response to the Notice of Non-Compliant Appeal Brief mailed March 31, 2009, please find submitted herewith corrected "Grounds of Rejection to be Reviewed on Appeal" and "Argument" sections to correct typographical errors referring to Claim 29 instead of Claim 19.

Appellants respectfully submit that the attached sections include correct reference to the claims as required by the Notice of Non-Compliant Appeal Brief.

6.   ***Grounds of Rejection to be Reviewed on Appeal.***

Pending Claims 1, 2, 4-6, 11-13, 15-17, 18, 19, 21-23, 28-30, 32-34, 35, 36, 38-40, 45-47, 49-51, 52-54, 56, 58 and 59 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,690,407 to Parker et al. And the remaining claims, namely Claims 3, 7-10, 14, 20, 24-27, 31, 37, 41-44, 48, 55 and 57, stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Parker, in view of U.S. Patent No. 6,910,074 to Amin et al. All of the aforementioned claim objections and rejections are the subject of this appeal.

7.   ***Argument.***

As indicated above, Claims 1, 2, 4-6, 11-13, 14-17, 18, 19, 21-23, 28-30, 32-34, 35, 36, 38-40, 45-47, 49-51, 52-54, 56, 58 and 59 stand rejected being anticipated by Parker; and the remaining claims, namely Claims 3, 7-10, 14, 20, 24-27, 31, 37, 41-44, 48, 55 and 57, stand rejected as being unpatentable over Parker, in view of Amin. As explained below, Appellants submit that the claimed invention is patentably distinct from Parker and Amin, taken individually or in any proper combination. In view of the remarks presented herein, Appellants respectfully request reconsideration of the application and reversal of the rejection of all of the pending claims thereof.

A.   ***Claims 1, 2, 4-6, 11-13, 15-17, 18, 19, 21-23, 28-30, 32-34, 35, 36, 38-40, 45-47, 49-51, 52-54, 56, 58 and 59 are Patentable***

According to one aspect of the present invention, as reflected by independent Claim 1, a system is provided that includes an originating node configured to initiate communication with a terminating node, and an intermediate node located between the originating node and the terminating node. As recited, the originating node is configured to initiate communication with the terminating node in a manner based upon at least one parameter for communication with at least one of the intermediate node or the terminating node. The originating node is configured to initiate communication by (a) requesting communication with the terminating node via the intermediate node, or (b) notifying the terminating node of incoming data independent of the intermediate node. The originating node or the intermediate node is configured to notify the

terminating node of incoming data when the originating node initiates communication in accordance with aforementioned (a) (i.e., by requesting communication with the terminating node via the intermediate node). The terminating node, upon being notified of incoming data, is configured to register with the intermediate node to thereby enable Internet Protocol (IP) communication between the originating node and the terminating node via the intermediate node.

In contrast to independent Claim 1, Parker (as well as Amin) does not teach or suggest a system for establishing an IP connection with a terminating node, whereby the terminating node, upon being notified of incoming data (independent of an intermediate node), is configured to register with the intermediate node to thereby enable Internet Protocol (IP) communication between the originating node and the terminating node via the intermediate node. Briefly, Parker discloses a combined telephonic/computerized on-demand ordering system whereby a central server may establish a data call between the computers of a first user (calling party – alleged originating node) and a second user (called party – alleged terminating node) as telephones of the first and second users carry out a telephone call. Parker discloses that its central server (alleged intermediate node) may register a second user (called party) and include a database of registered second users including their respective telephone numbers (of their telephones) and IP addresses (of their computers). In this regard, one may argue that Parker discloses registering a second user (alleged terminating node) with the central server (alleged intermediate node).

Even given the aforementioned interpretation, Parker still does not teach or suggest that its second user (called party) is notified of incoming data independent of the central server (alleged intermediate node), and then registers with the central server, similar to the terminating node of independent Claim 1. That is, Parker still does not teach or suggest that its second user (called party) registers with the central server upon being notified of incoming data (independent of the central server), as recited by independent Claim 1. Rather, interactions with a second user (called party) according to Parker presuppose registration of that called party with the central server. Parker, col. 4, ll. 47-50 ("When a user is 'on-line' …, their computer sends a registration message to the central server 13 to notify it that the user is available."). Independent Claim 1, on the other hand, recites notifying the terminating node of incoming data, and upon that notification, registering the terminating node to enable IP communication.

1. Interpretation of Parker Proffered by Examiner in Final Official Action

In response to the foregoing, the Examiner in the final Official Action stated as follows:

> ... *Parker discloses wherein the user, e.g. "terminating node", browses by commercial and private entities for exchange data over the Internet for its current session, e.g. "upon being notified of incoming data", is configured to register with the DNS, e.g. "intermediate node", to receive a temporarily assigned IP address for exchanging data with server over the Internet as specified in col. 2, lines 20-32; with secure band billing processes as disclosed in col. 4, lines 42-53.*

Final Official Action of Aug. 27, 2008, page 30. Appellants respectfully disagree with this interpretation.

In the preceding interpretation, the Examiner takes the position that Parker discloses a user browsing hosted content (compared to notifying of incoming data), and then registers with a DNS to receive a temporarily-assigned IP address (compared to registering with the intermediate node upon being notified of incoming data). Initially, Appellants note that Parker does not in fact disclose a user registering with a DNS to receive a temporary IP address, but instead discloses that a user's <u>Internet service provider</u> assigns a temporary IP address. As disclosed by Parker and as is well known, a DNS server translates IP addresses to more-convenient logical names. A network address translator (NAT) of an Internet service provider assigns temporary IP addresses to users of the respective service provider.

In line with Parker's description of the DNS system, a user is assigned a temporary IP address by the user's Internet service provider before the user may browse hosted content, the assigned IP address being required for the host (commercial or private entity) to return its content to the user. Thus, instead of a user browsing hosted content before receiving a temporarily-assigned IP address (compared to receiving notification of incoming data and thereupon registering with the intermediate node – as per independent Claim 1), <u>in line with Parker, the user receives the temporarily-assigned IP address before browsing hosted content</u>. This is in relation to registration with the intermediate node to thereby enable IP communication, as also per independent Claim 1. But instead of the user being notified of incoming data before registering to enable IP communication, as per independent Claim 1, Parker discloses registering to enable IP communication to receive incoming data (browsing hosted content).

2. Interpretation of Parker Proffered by Examiner in Advisory Action

Most recently, in response to the foregoing, the Examiner in an Advisory Action stated:

> ... Parker et al. (U.S. 6,690,407) discloses a combined telephonic/computerized on-demand ordering system employed the computer network communication session that establishes in response to a telephone call made from the user/requestor via the central server (see Abstract); wherein, upon the called party is alert for requesting to establish connection through voice call ("notification of incoming data"; see col. 4, lines 22-32); and in order to establish communication session between users via central server and for security and/or billing purpose, users have to send registration message to central server, e.g. "register with the intermediate node", to notify that the user is available, for establishing connection/services over Internet, e.g. "enable IP communication" (see col. 4, lines 33-67; and since central server database maintains 'only registered users' as specified in col. 3, lines 16-30; col. 4, lines 41-67). Therefore, the examiner concludes that Parker teaches the arguable features.

Advisory Action of Dec. 12, 2008, Continuation Sheet.

As disclosed by Parker, a voice call is established between a calling and a called party, and establishment of the voice call provides a way to alert the called party of a request to establish a computer connection between computers of the calling and called party. According to the Examiner's aforementioned interpretation of Parker, this alert corresponds to notifying a terminating node of incoming data independent of an intermediate node (alleged central server of Parker), as per independent Claim 1. But for Parker to anticipate independent Claim 1 under this interpretation, Parker must explicitly or inherently disclose that upon being alerted of a request to establish a computer connection (alleged notification of incoming data), the called party's computer (alleged terminating node) is configured to register with the central server (alleged intermediate node) to enable IP communication between the calling party's computer (alleged originating node) and the called party's computer via the central server. *See MPEP* § 2131 (explaining that anticipation of a claim requires that a single cited reference <u>explicitly or inherently</u> – i.e., necessarily – disclose each and every element of the claimed invention). Appellants respectfully submit that this is not the case.

More particularly, Parker does not in fact explicitly or inherently disclose that upon being alerted of a request for a data connection from the calling party's computer (alleged notification

of incoming data), the called party's computer registers with the central server to enable IP communication, similar to the terminating node of independent Claim 1. Rather, Parker discloses that the called party registers with the central server before being alerted of a request for a data connection. As disclosed by Parker, when a user is on-line, their computer registers with the central server to not only notify the central server that the user is available, but to also permit the central server to determine the current IP address at which the user resides for its current connection session. Parker, col. 4, ll. 47-53. Then, when a calling party (first user) dials a called party's (second user's) telephone number – i.e., target number – to establish a voice telephone call, the central server uses the target number to identify the IP address of the called party's computer to initiate a connection with that computer. *Id.*, col. 5, ll. 1-12. As clearly disclosed by Parker, this alert (alleged notification of incoming data) is sent to the IP address of the called party's computer, which IP address the central server learned during the called party's prior registration with the central server. The alert is not sent to the called party's computer such that the computer, upon being alerted, registers with the central server, similar to the claimed invention. And moreover, the alert is sent to the called party's computer from the central server, and is not sent independent of the central server (alleged intermediate node), similar to the notification of the claimed invention.

Appellants therefore respectfully submits that independent Claim 1, and by dependency Claims 2-17, is patentably distinct from Parker. Appellants also respectfully submit that independent Claims 18, 35, 52 and 59 recite subject matter similar to those elements of independent Claim 1 discussed above, including the aforementioned registering a terminating node or apparatus upon or in response to receiving a notification to thereby enable IP communication. As such, Appellants respectfully submit that independent Claims 18, 35, 52 and 59, and by dependency Claims 19-34, 36-51 and 53-58, are also patentably distinct from Parker for at least the reasons given above with respect to independent Claim 1.

3.   *Dependent Claims*

In addition to the above reasons, Appellants respectfully submit that various ones of dependent Claims 2, 4-6, 11-13, 14-17, 19, 21-23, 28-30, 32-34, 36, 38-40, 45-47, 49-51, 53, 54,

56 and 58 recite features further patentably distinct from Parker. Examples of a number of these features are explained below.

a) Dependent Claims 2, 19 and 36

Dependent Claim 2 (and similarly dependent Claims 19 and 36) recites notifying the terminating node of incoming data further in accordance with a non-IP-based communication technique, which is also not taught or suggested by Parker. Embodiments of the claimed invention permit a non-IP-based notification to the terminating node, which upon being notified, registers with the intermediate node, as per dependent Claim 2 – read in context of its dependence on independent Claim 1. Parker, on the other hand, does not teach or suggest a notification of incoming data upon which any terminating node registers with an intermediate node, much less a non-IP-based notification.

For allegedly disclosing the feature of dependent Claim 2, the Examiner has cited FIG. 4 (computers 10 and 11), as well as column 7, lines 5-11, of Parker for disclosing "direct packet exchange for non-IP based." Appellants note that just as with the other figures of Parker, FIG. 4 is also premised on IP communication between computers 10 and 11. In FIG. 4, the central server notifies computers 10 and 11 of the other's IP address, and from this exchange of IP addresses, the computers may communicate with one another without the central server. Even in this instance, however, Parker does not disclose a non-IP-based notification upon which either of the computers registers with an intermediate node, similar to dependent Claim 2.

Parker does at column 7, lines 5-11 refer to delivery of a video/audio program over a non-Internet connection, such as a cable television connection. Even considering this disclosure, however, nowhere does Parker teach or suggest that this delivery of a video/audio program is a non-IP-based notification upon which the receiving node registers with an intermediate node to enable IP communication, similar to dependent Claim 2.

b) Dependent Claims 6, 23 and 40

Dependent Claim 6 (and similarly Claims 23 and 40) recites that communication is requested with the terminating node by sending a domain name service (DNS) query to a DNS

server to trigger the DNS server to communicate with the intermediate node to request communication with the terminating node, which is also not taught or suggested by Parker. For this feature, the Examiner has cited column 4, lines 5-19 of Parker for disclosing use of DNS servers. As disclosed by Parker, however, a DNS server may resolve a logical name of its central server (e.g., www.sprint.exchange.com) with a fixed IP address of the central server. This translation between logical names and IP addresses, however, does not explicitly or inherently correspond to a triggering of a DNS server to communicate with an intermediate node (allegedly Parker's central server) to request communication with a terminating node, similar to dependent Claim 6. Parker explicitly discloses that its computers (alleged originating and terminating nodes) are not listed with its DNS server, but does not disclose that its DNS server is triggered by a DNS query to communicate with its central server to request communication with a non-DNS-listed computer, similar to dependent Claim 6.

c)   *Dependent Claims 15, 16, 32, 33, 49 and 50*

Dependent Claim 15 (and similarly dependent Claims 32 and 49), and by further dependency Claim 16 (and similarly dependent Claims 33 and 50) recites communicating with a network address translator (NAT) and/or firewall (FW) to trigger the NAT/FW to notify the terminating node of incoming data, which is also not taught or suggested by Parker. For allegedly disclosing the feature of dependent Claim 15, the Examiner has cited column 15, lines 29-52 of Parker for disclosing "NAT and FW at the intermediate node and terminating node." In the cited passage, Parker does disclose an embodiment whereby its endpoints (computers 10 and 11) communicate across a NAT firewall. Even still, however, Parker does not explicitly or inherently disclose communicating with a NAT firewall to trigger the NAT firewall to notify a computer (alleged terminating node) of incoming data, upon which the respective computer registers with an intermediate node, similar to dependent Claim 15 – read in context of its dependence on independent Claim 1.

Further, as more particularly recited by dependent Claim 16 (and similarly dependent Claims 33 and 50), Parker does not teach or suggest a NAT/FW communicating with a gateway support node to trigger the gateway support node to notify the terminating node of incoming

data. In fact, other than referring to use of a NAT firewall, Parker does not disclose any particular functionality of its NAT firewall, mush less any functionality corresponding to that of dependent Claims 15, 16, 32, 33, 49 and 50.

> **B.   Claims 3, 7-10, 14, 20, 24-27, 31, 37, 41-44, 48, 55 and 57 are Patentable**

Pending Claims 3, 7-10, 14, 20, 24-27, 31, 37, 41-44, 48, 55 and 57 stand rejected as being unpatentable over Parker, in view of U.S. Patent No. 6,910,074 to Amin. As explained above, independent Claims 1, 18, 35, 52 and 59, and by dependency Claims 2-17, 19-34, 36-51 and 53-58, are patentably distinct from Parker. Appellants respectfully submit that Amin does not cure the deficiencies of Parker. That is, even considering Amin, neither Parker nor Amin, taken individually or in any proper combination, teach or suggest the aforementioned registering a terminating node or apparatus upon or in response to receiving a notification to thereby enable IP communication, as per independent Claims 1, 18, 35, 52 and 59. Appellants therefore respectfully submit that independent Claims 1, 18, 35, 52 and 59, and by dependency Claims 2-17, 19-34, 36-51 and 53-58, are patentably distinct from Parker, in view of Amin.

Appellants further note that even if one could argue (albeit incorrectly) that Parker and Amin did disclose individual elements of the claimed invention, Appellants respectfully submit that the Examiner has not provided a sufficient reasoning for their combination to teach the claimed invention. Appellants acknowledge the Supreme Court's recent decision in which the Court rejected a rigid application of the "teaching, suggestion or motivation" (TSM) test. *KSR Int'l. Co. v. Teleflex, Inc.*, 127 S.Ct. 1727, 82 USPQ2d (BNA) 1385 (2007). Nonetheless, in *KSR Int'l. Co.*, the Court did state that obviousness often requires determining whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue, and that to facilitate review, this analysis should be made explicit. *See KSR Int'l. Co.*, 127 S.Ct. at 1740–41, 82 USPQ2d (BNA) at 1396. Even further, the Court noted that "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.*, 127 S.Ct. at 1740-41, 82 USPQ2d (BNA) at 1396, *citing In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d (BNA) 1329 (Fed. Cir. 2006) (emphasis added).

As clearly explained by the Supreme Court in *KSR Int' l. Co.*, then, any finding of obviousness should be based on an apparent reason to combine the prior art, and <u>must be supported by more than mere conclusory statements</u>. In the instant case, the Official Action generally attempts to support the alleged combination of Parker and Amin by merely, and circularly, asserting that one skilled in the art would have been led to the combination because of the combination itself. With respect to the rejection of dependent Claim 3, for example, the Official Action alleges that one would have been led to combine SMS or multimedia service of Amin with the telecommunications over IP of Parker to provide SMS or multimedia service through the telecommunications network. *See* Official Action of Aug. 27, 2008, page 16. Other than concluding that the resulting combination would lead one skilled in the art to the combination, the Official Action does not provide any articulated reasoning with rational underpinning to support the particular modification of Parker to include the alleged feature of Amin. And even further, the Official Action fails to allege any particular manner of combining Parker and Amin that would result in the claimed invention.

CONCLUSION

For at least the foregoing reasons, Appellants respectfully request that the rejections be reversed.

Respectfully submitted,

Andrew T. Spence
Registration No. 45,699

CUSTOMER NO. 00826
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Charlotte Office (704) 444-1000
Fax Charlotte Office (704) 444-1111
LEGAL02/31255612v1

ELECTRONICALLY FILED USING THE EFS-WEB ELECTRONIC FILING SYSTEM OF THE UNITED STATES PATENT & TRADEMARK OFFICE ON APRIL 6, 2009.